

To Ted Mix/R10/USEPA/US@EPA

CC

bcc

Subject Fw: Info re: East Fork Issaquah Creek Ammonia Spill

Special Agent
U.S. Environmental Protection Agency
Criminal Investigation Division - Seattle Area Office
1200 6th Avenue, CID-073, Suite 900
Seattle, WA 98101
Office
Cell

---- Forwarded by

/R10/USEPA/US on 10/19/2009 03:07 PM -----



Rene Fuentes/R10/USEPA/US 10/16/2009 04:34 PM

To R10/USEPA/US@EPA

cc Rene Fuentes/R10/USEPA/US@EPA

Subject Re: Info re: East Fork Issaquah Creek Ammonia Spill

Not sure how you wanted the reply, and you were not there when I called, so I will sketch it out for you in an email since I do have some time before i leave today. If you need an actual memo let me know how much detail you want on the calculations and I can do one next week.

Used the times in your email and also compared the date of event to the recent past hydrographs for Issaquah Creek, which showed that flow had been stable in the main stem for several days, and thus I assumed that the flows in the East Fork were also stable and comparable to the late August data you sent.

The time of discharge seems to be unclear since something was documented at 0700 but it is unclear if it could have started earlier than that. Also only used the calculations until the last sample at 1656 at which point there were still 88 mg/L in that sample. Probably would have <u>additional mass</u> if I had attempted to assume a point where the concentrations had matched the background value of 0.721 mg/L

The flow used for calculations was 2.49 cfs based on the King County Hydrologic Information Center discharge from August 31, 2009 (the last available data for the creek discharge), the time of discharge from 0700 to 1453 or about 8 hours of discharge at the 168 mg/L for a subtotal of 750 lbs and and additional 2 hours at a decreased concentration which varied between 168 mg/L at 1453 and 88 mg/L at 1656, for a second subtotal which were calculated two ways. This subtotals ranged between 142 lbs at 168 mg/L, and 97 lbs at 88 mg/L due to estimates as the low end of concentration which is a value from data, or a mean between the high and low at the two sampling events. The total NH3-N discharge calculated in this manner gives a range of 848 lbs to 892 lbs that went into East Fork of Issaquah Creek during this event.

The accuracy of the calculations would vary due to the uncertainties mentioned above. But given the data that is available this seems to be in the correct range, and most likely an underestimate since there may have been a longer period of discharge, there may have been higher concentrations prior to the 1453 sample, and it is unclear how long the discharge continued after the 1656 sample, where these calculations were stopped but the concentration remained at 88 mg/L at that time(way above the 0.721 mg/L background).

Let me know if you would like to discuss the calculations or to have this presented in a different format. Rene

René Fuentes P.E., P.HG.

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Rene, Attached is an event timeline, lab results,...

10/16/2009 10:22:57 AM

/R10/USEPA/US 10/16/2009 10:24 AM

To Rene Fuentes/R10/USEPA/US@EPA

CC

Subject Info re: East Fork Issaquah Creek Ammonia Spill

Rene

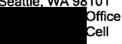
Attached is an event timeline, lab results, and stream guage information for the East Fork, which is taken upstream of the spill location.

Additionally, WDFW called and reported the dead/dying fish at 13:50.

Thanks for your help.

Special Agent

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20091016091320153.pdf



Calvin Terada/R10/USEPA/US 10/08/2009 11:01 AM

To "Matthew Carr" <carr.matthew@epa.gov>, "EPA ER Duty Officer EPA" <r10_oscnrcreports@epa.gov>, "Greg Weigel" <weigel.greg@epa.gov>, "Suzanne Powers"
cc Wally Moon/R10/USEPA/US, Chris

Field/R10/USEPA/US@EPA

bcc

Subject Darigold Issaquah, WA Ammonia Release - 10/7/2009

Team,

Ecology told me that they received a very late report from Darigold at their Issaquah, WA facility that they had an ammonia release into Issaquah Creek yesterday (10/7/2009). Apparently, the released ammonia caused a fish kill of 45 fish in the creek.

Since the release is probably secure by now, it looks like a ripe case for EPCRA since no NRC report has been filed (according to Greg).

Suzanne, if you or need help from an OSC to assist in your investigation, please let me know.

Thanks, Calvin